

**Ex Parte Notice**

December 7, 2016

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554

Re: *Transition from TTY to Real-Time Text Technology*, CG Docket No. 16-145; *Petition for Rulemaking to Update the Commission's Rules for Access to Support the Transition from TTY to Real-Time Text Technology*, and *Petition for Waiver of Rules Requiring Support of TTY Technology*, GN Docket No. 15-178

Dear Ms. Dortch:

On Tuesday, December 6, 2016, Rebecca Thompson and Courtney Neville of Competitive Carriers Association (“CCA”);<sup>1</sup> Steve Sharkey, Drew Morin, Shellie Blakeney and Eric Hagerson of T-Mobile US, Inc.<sup>2</sup> (“T-Mobile”); Kara Azocar of General Communication, Inc. (“GCI”); Grant Spellmeyer of US Cellular Corp. (“US Cellular”); and John Nakahata of Harris, Wiltshire & Grannis LLP (on behalf of CCA and T-Mobile) met with Karen Peltz Strauss, Bob Aldrich, Suzy Rosen Singleton, Eliot Greenwald and Michael Scott of the Consumer and Governmental Affairs Bureau and Bill Richardson of the Office of the General Counsel regarding the above-referenced proceeding. In addition, Mr. Nakahata separately spoke with Mr. Greenwald and Ms. Strauss on December 5, 2016, and Ms. Thompson separately spoke with Ms. Strauss on December 6, 2015. This ex parte notice summarizes points discussed in all these meetings and conversations.

CCA, T-Mobile, US Cellular, and GCI (collectively “Participants”) believe that an order setting a framework for Real Time Text (“RTT”) implementation can be positive for all stakeholders, implementing new RTT capabilities and supplanting the existing waivers, provided that the requirements and transition afford industry participants flexibility and sufficient time to deploy RTT and access devices with this new technology. Among other things, the proposed

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<sup>1</sup> CCA is the nation’s leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 customers to regional and national providers serving millions of customers. CCA also represents approximately 200 associate members including vendors and suppliers that provide products and services throughout the mobile communications supply chain.

<sup>2</sup> T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

order would provide a better articulated and more appropriately phased implementation schedule than the existing waivers, which, for example, would require providers to implement RTT by the end of 2017.

The Participants discussed the proposed language Participants had submitted with the ex parte letter of December 2, 2016.<sup>3</sup> Participants stated that they appreciated the Bureau's willingness to consider modifications providing flexibility with respect to the initial and final deadlines for both Tier I and non-Tier I carriers. Participants proposed further modifications to their proposed language, which is reflected in the attached document. These changes help to align the final carrier obligations with the manufacturers' obligations to support RTT, and will further minimize the need for carriers to seek waivers with respect to new services and devices that are not foreseeable at this time. The revised language also helps to address unusual situations that may develop for small carriers.

With respect to the core requirements for character error rates and latency, Participants pointed out that use of industry standards as safe harbors for compliance is preferable to prescriptive requirements that may become outdated or may conflict with industry standards. For example, the term "latency" is ambiguous, and could be construed to refer to buffering within the device prior to transmission, or to end-to-end delivery time from one RTT device to another. RFC 4103 does not set standards for end-to-end delivery time, and it would not be reasonable for the Commission to establish such a mandate, since a carrier does not necessarily control the entire end-to-end path. With respect to buffering, the Commission should not set a maximum buffering time of less than 500 ms, which is the maximum duration recommended (but not mandated) in RFC 4103's first preferred alternative in the case of congestion.<sup>4</sup> Notably,

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<sup>3</sup> See Letter from Kristine Laudadio Devine, Counsel to T-Mobile USA Inc., to Marlene H. Dortch, Secretary, FCC, CG Docket No. 16-145, GN Docket No. 15-178 (filed Dec. 2, 2016).

<sup>4</sup> See RTP Payload for Text Conversation, §§ 5.1 ("Recommended Basic Procedure"), 9 ("Congestion Considerations") (June 2005) ("RFC 4103"), <https://tools.ietf.org/html/rfc4103#page-14>. The statement in the ex parte of Drs. Christian Vogler and Greg Vanderheiden and Mr. Gunnar Hellstrom, dated November 8, 2016, incompletely references RFC 4103 when it states that RFC 4103 "specifies a transmission interval of 300 milliseconds." Letter from Dr. Christian Vogler, Dr. Gregg Vanderheiden, and Mr. Gunnar Hellström to Marlene H. Dortch, Secretary, FCC, CG Docket No. 16-145, GN Docket No. 15-178 (filed Nov. 8, 2016). RFC 4103, Section 5.1 states:

Packets are transmitted when there is valid T.140 data to transmit.

T.140 specifies that T.140 data MAY be buffered for transmission with a maximum buffering time of 500 ms. A buffering time of 300 ms is RECOMMENDED when the application or end-to-end network conditions are not known to require another value.

As Drs. Vogler and Vanderheiden and Mr. Hellström reflect in their ex parte, as used in the RFC 4103 "may" and "recommended" are permissive, but not required. RFC 4103 uses "shall" to indicate absolute requirements under the standard.

RFC 4103 would, in some circumstances, permit buffering time of up to five seconds.<sup>5</sup> Accordingly, an even better approach may be simply to refer to RFC 4103 as a safe harbor, without specifying an absolute maximum latency period independent of industry standards. Similarly, the order should not include specific methods to achieve TTY backwards compatibility as a core feature. The Alliance for Telecommunications Industry Solutions (“ATIS”) is currently voting on ATIS-0700029, standard on RTT Mobile Behavior, which specifies implementation guidelines for RTT and includes specific guidance on backwards compatibility that takes into consideration the industry challenges with implementing an automatic answer feature applied to incoming TTY calls by RTT-enabled devices. If the Commission intends to include specific performance requirements rather than rely on industry standards, the specific requirements should be included in a further notice to provide an opportunity for detailed review to avoid adoption of requirements that may conflict with industry standards, thereby delaying or undermining RTT deployment.

Participants also discussed the proposed performance objectives, and stated that the Commission should seek further comment to vet and refine these objectives to ensure that they do not conflict with or impede RTT deployment. In any event, as explained to us, these are interpretative guidelines to help ensure that carriers and manufacturers consider certain features as they carry out their future responsibilities under Section 716 and 717 of the Communications Act, which the order would clarify applies to RTT as an electronic messaging service. As interpretative guidance for carriers and manufacturers to consider going forward, the Commission should be clear that these objectives are not independent mandates outside of Section 716’s framework.

Please do not hesitate to contact me if you have any questions.



John T. Nakahata  
*Counsel to T-Mobile USA, Inc.*

cc: Bob Aldrich  
Brendan Carr  
Rosaline Crawford  
Eliot Greenwald  
Erin McGrath  
Daudeline Meme  
Bill Richardson  
Michael Scott  
Henning Schulzrinne

Holly Sauer  
Suzy Rosen Singleton  
Karen Peltz Strauss  
Jennifer Tatel  
Jennifer Thompson

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<sup>5</sup> See RFC 4103 § 9 (Listing as an alternative in the case of congestion, “Increase the shortest time between transmissions to a higher value, not higher than 5 seconds. This will cause unpleasant delays in transmission, beyond what is allowed according to T.140, but text will still be conveyed in the session with some usability.”).

## **REVISED PROPOSED CHANGES FOR CARRIER REAL-TIME TEXT OBLIGATIONS:**

CCA proposes the following changes to staff-outlined proposals:<sup>1</sup>

- The FCC should modify the first step of the transition to allow a phased-in native RTT approach, as an alternative to a downloadable app.
  - Below is sample language that would achieve that result.
- The FCC should modify the final step of the transition to provide both Tier I and non-Tier I carriers sufficient time to come into full compliance, as outlined below.
- In addition, the FCC must ensure that the final RTT requirement does not impose obligations to the extent that a manufacturer cannot achievably support RTT as needed by that carrier.

### **Proposed Language for Carrier Step 1:**

(\_\_\_) A provider of a covered service meets its obligation to support RTT for Tier I carriers, by December 31, 2017, or, for all other carriers by June 30, 2020, if that carrier, as of that date:

(a) Offers to consumers a downloadable app or plug-in that supports RTT; or

(b) (i) Has implemented in its core network the capability to support RTT, (ii) offers at least one handset that supports RTT, and, (iii) for all authorized user devices<sup>2</sup> specified on or after that date, has included in future design specifications, the requirement to support RTT. A carrier must meet these obligations except to the extent that it is not achievable for a particular manufacturer to support RTT on that carrier's network.

### **Proposed Language for Carrier Step 2:**

(\_\_\_) Tier I carriers must support RTT for all new authorized user devices by December 31, 2019. Non-tier I carriers must support RTT for all new authorized user devices by June 30, 2021. A carrier must meet these obligations except to the extent that it is not achievable for a particular manufacturer to support RTT on that carrier's network. A carrier may rely in good faith on a manufacturer's representations that it has complied with its obligations under Sections 716 and 717 of the Communications Act.

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<sup>1</sup> All dates assume a deadline for manufacturers to incorporate native RTT capability in new handsets, when achievable, by December 31, 2018.

<sup>2</sup> This assumes that authorized user devices are defined in a way that is limited to voice-enabled, IP based user devices that would otherwise be subject to TTY requirements.